

We Claim:

1. In an electronic device, a method, comprising the steps of:
 - 5 providing a plurality of entries containing data;
assigning an entry identification number ("entry ID") to each of said entries,
each said entry ID being a unique value;
storing each entry indexed by its entry ID;
altering a selected one of said entries to create a new entry, said new entry
 - 10 having an entry ID assigned,
cross-indexing said new entry with said selected entry;
updating a metastructure associated with said selected entry to reflect
relationship changes caused by said new entry, said updating including the time said
selected entry was altered; and
 - 15 displaying said new entry in response to requests for said selected entry.
2. The method of claim 1, comprising the further steps of:
 - 20 parsing said selected entry into segments;
assigning an item ID having a unique value to each of said segments; and
updating the metastructure of said selected entry to include a reference to said
item IDs.
3. The method of claim 2, comprising the further step of:
 - 25 appending the parsed data from said selected entry to a journal, said journal
being a data structure located in permanent memory.
4. The method of claim 1, comprising the further step of:
 - 30 attaching a label to at least one of said segments, wherein said label is cross-
indexed with said segment, said selected entry and with a data structure referencing
other entries containing segments with said label.
5. The method of claim 4 comprising the further steps of:
 - 35 searching said plurality of entries based on said label; and
displaying the results of said search on a web page that references entries from
said plurality of entries that contain said label.

6. The method of claim 1, comprising the further step of:

attaching a user-provided label to a user-defined part of said selected entry, said label being cross-indexed with said user-defined part, said selected entry and with a data structure referencing other entries containing said label.

7. The method of claim 6, comprising the further step of:

displaying a web page containing only said user-defined part of said selected entry.

8. The method of claim 6, comprising the further steps of:

searching said plurality of entries based on said label; and
displaying the results of said search on a web page, wherein said web page references all of the entries from said plurality of entries that contain said label.

9. The method of claim 6, comprising the further steps of:

replacing said label with a different label that is being cross-indexed with said segment, said selected entry and a data structure of other entries containing segments with said replacement label;

indicating in said data structure holding the original label the time the original label is replaced; and

displaying said different label with said selected entry in response to requests for earlier versions of said selected entry which originally lacked said different label.

10. The method of claim 9, comprising the further steps of:

selecting a time slice to apply to said selected entry, said time slice corresponding to a period of time;

selecting a perspective to apply to said selected entry, said perspective being a date reference controlling which labels to display with said entry; and

displaying said selected entry constrained by said time slice and said perspective.

11. The method of claim 9, comprising the further steps of:

setting the perspective to a specified date;

displaying the net effect of all label additions and removals for said selected entry which took place by said specified date.

12. The method of claim 9, comprising the further steps of:
 setting the perspective to a specified range of dates;
 displaying the end result of all label additions and removals for said selected
 entry which took place by the beginning of said specified range of dates; and
 5 displaying all of the additions taking place during said specified range of dates.
13. The method of claim 9, comprising the further steps of:
 setting the perspective to include all dates;
 displaying the result of all label additions for said selected entry without
 10 displaying the effect of any label removals for said selected entry.
14. The method of claim 1, comprising the further steps of:
 providing a permanent memory location
 parsing the data contained within said selected entry; and
 15 storing the parsed data in a permanent memory location.
15. The method of claim 14, comprising the further steps of:
 storing a reference to at least one of, another entry, an update to said selected
 entry, and a labeling of said selected entry, in a metastructure stored in a data structure
 20 in said permanent memory location.
16. The method of claim 15 wherein said metastructure includes a grammar object, said
 grammar object expressing a ternary relationship among said data.
- 25 17. The method of claim 1 wherein said selected entry is an email message.
18. The method of claim 1 wherein said selected entry is an attachment to an email
 message.
- 30 19. The method of claim 1 wherein said selected entry is a web page.
20. The method of claim 1 wherein said selected entry is user-input text.
21. The method of claim 1 wherein said electronic device is interfaced with a network.
- 35 22. The method of claim 1 wherein said data contained in said selected entry is audio
 data.

23. The method of claim 1 wherein said data contained in said selected entry is video data.

24. The method of claim 1 wherein said entry is a complete document.

25. In a network, a method comprising the steps of:

storing a selected entry;

updating said selected entry to create a new entry;

cross-indexing said selected entry to said new entry; and

10 displaying said new entry automatically via a document publishing system when
said selected entry is selected by a user, said displayed new entry containing references
back to said selected entry.

26. The method of claim 25, comprising the further steps of:

15 dividing said selected entries into user defined segments;

attaching a label to at least one of said segments, said label cross-indexed with said segment, said selected entry and an index holding references to entries containing said label.

20 27. In an electronic device, a medium holding computer-executable instructions for a method, said method, comprising the steps of:

providing a plurality of entries containing data;

assigning an entry identification number (“entry ID”) to each of said entries, said entry ID being a unique value;

25 storing each entry indexed by its entry ID;

altering a selected one of said entries to create a new entry, said new entry having an entry ID assigned, said new entry cross-indexed with said selected entry; updating a metastructure associated with said selected entry to indicate the time said selected entry was altered; and

30 displaying said new entry in response to requests for said selected entry.

28. The medium of claim 27 wherein said method comprises the further steps of:

parsing said selected entry into segments;

assigning an item ID having a unique value to each of said segments; and

35 updating the metastructure of said selected entry to include a reference to said
item ID.

29. The medium of claim 28, wherein said method comprises the further step of:

5 attaching a label to at least one of said segments, said label cross-indexed with said segment, said selected entry and with a table of other entries containing segments with said label.

30. In an electronic device, a method comprising the steps of:

10 providing a plurality of entries containing data, said data including labels referencing segments of said data;
cross-referencing a selected one of said plurality of entries with at least one different version of said selected entry;
storing in a datastructure associated with said selected entry the time said labels became associated with said selected entry;
15 storing in said datastructure associated with said selected entry the time said at least one different version became associated with said selected entry;
selecting a time slice to apply to a selected entry, said time slice corresponding to a period of time;
selecting a perspective to apply to said selected entry, said perspective being a
20 date reference controlling which labels to display with said entry; and
displaying said selected entry constrained by said time slice and said perspective.

31. In an electronic device, a method, comprising the steps of:

25 providing a plurality of entries containing data, said data including labels cross-indexed with segments of said data;
searching said plurality of entries based on said label; and
displaying the results of said search in a document referencing other entries from said plurality of entries that contain said label.